

MEMORANDUM

DATE: October 28, 2003
 TO: The Board of Directors
 FROM: Larry M. Foster, General Manager, James City Service Authority
 SUBJECT: Work Session - Riverview Plantation Water System

On October 14, 2003, the Board was apprized of the water supply issue in the Riverview Plantation neighborhood. As a quick review, the privately-owned Riverview Plantation Water System with 79 customers has experienced problems for years. In September, the Virginia Department of Health issued two “boil water” notices, the last of which continues to be in place.

The Riverview Plantation Home Owners Association (HOA) has asked the James City Service Authority (JCSA) to acquire and operate the water system. An HOA neighborhood survey indicated that 100 percent of the residents desire JCSA to take over the water system, and 85 percent indicated a willingness to pay \$5,000 toward the estimated \$1.2 million costs of the upgrades of the water system. The HOA has also agreed to purchase the water system from the owner, Tidewater Water Supply Company, and give the system to the JCSA.

At the October 14, 2003, meeting, the Board by consensus agreed:

1. To continue working with the Riverview Plantation neighborhood to acquire the water system; and
2. A \$5,000 per customer contribution was acceptable.

Three questions remain as follows:

- Impact on JCSA budget?
- Water Supply Alternatives?
- Method of payment for residents?

Impact on JCSA Budget:

The project can be divided into two phases. The first and most critical is providing a new water supply at an estimated cost of between \$550,000 and \$750,000. The second phase, replacing the Water Distribution System at an estimated cost of \$600,000, will/can be delayed for 7-8 years.

If the total costs are \$1.2 million, the following is an outline of a proposed budget for the project:

Revenues:

\$ 400,000	Customer Contribution (80 x \$5,000)
<u>800,000</u>	JCSA Capital Improvement Program
<u>\$1,200,000</u>	Total

Expenditures:

	<u>Capital Improvement Program</u>							
<u>Year</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>
Water Supply Project	\$300,000	\$300,000						
Distribution System			\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000

Water Supply Alternatives:

The existing well facility is antiquated, does not have adequate water production capacity, the hydro-tank is not pressure rated and the facility also does not have a backup power supply. A new water source is necessary to meet the needs of the community. There are two water source alternatives:

- New well facility
- Waterline extension from Wexford Hills

1. New Well Facility:

A primary challenge with a new well facility in the Riverview Plantation neighborhood is water quality. For an unknown reason the Chickahominy-Piney Point Aquifer, the traditional potable water aquifer, is small and unproductive in the area. Therefore, the Potomac Aquifer, which will require treatment, is the only on-site water source. The treatment alternative will likely be Reverse Osmosis (RO) - making the well facility more costly to build and operate. An estimate of \$750,000 to build an RO facility was offered by local engineers who have recently designed a similar facility. The annual estimated costs to operate the facility are \$35,000 while revenues at current rates are expected to be approximately \$16,000.

This project will take between 2-3 years to permit and build. Since the treatment process requires a discharge of the treatment process by-product, a discharge permit will be necessary along with the Groundwater Withdrawal Permit. While there are no anticipated problems in obtaining the permit both the withdrawal and discharge will take a significant amount of time, effort, and expense.

2. Waterline Extension from Wexford Hills:

The Wexford Hills well facility, located approximately 8,000 feet from Riverview Plantation, has adequate water production capacity. Additional pumping capacity will have to be added to the facility to accommodate the water demand for the Riverview neighborhood. A waterline can be constructed between the two neighborhoods. The waterline will cost between \$100,000 to \$200,000 less to construct than the above-described well facility. In addition, the costs to operate and maintain the waterline once constructed will be negligible. Unfortunately; the waterline, if constructed, will be located outside the Primary Service Area (PSA) and could create growth related challenges.

If this alternative is selected it will take between 12 and 18 months to permit and construct and will require a modification the Wexford Hills Groundwater Withdrawal Permit. A discharge permit will not be necessary. The County has allowed waterlines to be constructed outside the PSA in the past (Route 5 and Jolly Pond Road). These waterlines required a special use permit (SUP). The SUP included a condition that allowed only one water connection per parcel located adjacent to the waterline that existed on the date the SUP was approved. There are only 10 parcels along Riverview Road between the Wexford and Riverview neighborhoods. In

addition, there are 10 parcels within Riverview Plantation that will be fronted by the waterline that currently obtains their water from private wells. If the waterline is constructed, these homes may someday desire to connect to the water system. Using past practice only 20 connections would be allowed to the waterline.

Staff continues to discuss which alternative is appropriate for this situation.

Method of Payment for Residents:

The County Attorney's Office continues to research the most effective manner of collecting the payment of the \$5,000 contribution from the residents. While the service district approach initially seemed the most feasible, the type of tax (ad valorem premised on the value of the property) envisioned in this chapter is not logical for what is really an assessment or fee for connection to the system.

While research is not complete at this point, in all likelihood, the Attorney will be recommending the establishment of a sanitary district under Section 21-112.22 et seq., of the Virginia Code as the vehicle to enable the collection of the \$5,000 fee. The benefit of this chapter is, it also permits a mandatory connection to the system.

Recommendation

Because of the complexities, such as public hearings and requisite public notices, of establishing the a Sanitary District, staff recommends that the Board approve the attached resolution offering assurances to the residents of Riverview that the JCSA will continue its efforts to assume ownership of the water system.

Larry M. Foster

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